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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/506,533	02/17/2000	Nicholas J. DeCristofaro	30-4519CIP1(4710)	7488
7.	590 02/13/2003			
ATTN: PATEN SERVICES HONEYWELL INTERNATION INC 101 COLUMBIA ROAD AB2B			EXAMINER	
			TAMAI, KARL I	KARL I
Morristown, N.	J 07962		ART UNIT	PAPER NUMBER
			2834	

Please find below and/or attached an Office communication concerning this application or proceeding.

The MAILING DATE of this communication appreciation of the communication appreciation of the communication appreciation of the communication appreciation of the communication of the communication. - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a replection of the communication of the period for reply specified above, the maximum statutory period Failure to reply within the set or extended period for reply will, by statute of the communication of the communication of the period for reply within the set or extended period for reply will, by statute of the communication of the period for reply within the set or extended period for reply will, by statute of the communication of the period for reply within the set or extended period for reply will, by statute of the period for reply in the communication.	Y IS SET TO EXPIRE 3 N 136(a). In no event, however, may a ly within the statutory minimum of th will apply and will expire SIX (6) MC	MONTH(S) FROM a reply be timely filed
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	e, cause the application to become A	ONTHS from the mailing date of this communication. ABANDONED (35 U.S.C. § 133).
1)⊠ Responsive to communication(s) filed on 11/	<u> 13/02</u> .	
	nis action is non-final.	
3) Since this application is in condition for allow closed in accordance with the practice under	ance except for formal marker Ex parte Quayle, 1935 C	atters, prosecution as to the merits is D.D. 11, 453 O.G. 213.
Disposition of Claims	_	
4) Claim(s) 1-36 is/are pending in the application		
4a) Of the above claim(s) is/are withdra	iwn from consideration.	
5) Claim(s) is/are allowed.		
6)⊠ Claim(s) <u>1-36</u> is/are rejected.		
7) Claim(s) is/are objected to.		
8) Claim(s) are subject to restriction and/o	or election requirement.	
9)☐ The specification is objected to by the Examine	er.	
10)☐ The drawing(s) filed on is/are: a)☐ acce	epted or b) objected to by	the Examiner.
Applicant may not request that any objection to the		
11)☐ The proposed drawing correction filed on	_ is: a)□ approved b)□	disapproved by the Examiner.
If approved, corrected drawings are required in re	eply to this Office action.	
12) ☐ The oath or declaration is objected to by the E	xaminer.	
Priority under 35 U.S.C. §§ 119 and 120		
13) Acknowledgment is made of a claim for foreig	n priority under 35 U.S.C	;. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:		
 Certified copies of the priority document 	nts have been received.	
Certified copies of the priority documer		
 3. Copies of the certified copies of the price application from the International B * See the attached detailed Office action for a list 	ureau (PCT Rule 17.2(a))).
14) Acknowledgment is made of a claim for domes		
a) The translation of the foreign language process. 15) Acknowledgment is made of a claim for domes	rovisional application has	been received.
Attachment(s)	suc priority under 35 0.3.	5. 33 120 GHW 01 12 1.
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice	ew Summary (PTO-413) Paper No(s) of Informal Patent Application (PTO-152)

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DETAILED ACTION

Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- Claims 1, 2, 3, 8, 19-22, and 35 are rejected under 35 U.S.C. 103(a) as being 2. unpatentable over German Patent 28 05 438('438) and Mischler et al.(Mischler) (4255684). '438 teaches a stator for a motor having a plurality of segments(one pole section and one backiron section) where the flux must cross an air gap between free ends of a tooth section 3 and a back iron section 2. Each of the back iron sections having a top and bottom surface which has a line normal to the surface being perpendicular to the axis of rotation of the rotor. '438 teaches an stator core secured by being pressed into a housing or belted together (outer restraining member) and having self adhesive foil spacers(inner member). '438 teaches the tooth sections 3 being generally straight and the backiron sections 2 being generally bent. '438 does not teach the stator metal being an amorphous metal. Mischler teaches a stator for a motor with a plurality of segments formed from amorphous metal. Mischler teaches a rotor 22 supported within the stator. It is inherent that motor includes a means to support the rotor. It would have been obvious to a person skilled in the art at the time of the invention to construct the stator of '438 with the metal being an amorphous metal

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because Mischler teaches that amorphous metal is inexpensive to produce and has low magnetic losses.

Regarding claims 19-21, the heat treatment, application of a magnetic field, and annealing are method of making limitation that is not germane to the patentability of the apparatus.

- 3. Claims 4, 5, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over '438 and Mischler, in further view of Thomas(US 2556013). '438 teaches the wedges 7 having a self adhesive to bond the teeth sections 3 and the back iron sections 2, where the adhesive does not include the first free end 5. The self adhesive inherently covering a substantial portion of the stator, such that the adhesive bonds to both the tooth and the backiron sections. '438 and Mischler teach every aspect of the invention except, a steel band peripherally around the stator. Thomas teaches a steel band 2 to secure a laminated stator core 3. It would have been obvious to a person skilled in the art at the time of the invention to construct the stator of '438 and Mischler with the steel band of Thomas because steel has a good tensile strength and because '438 teaches the stator core is secured in a frame.
- 4. Claims 6, 7, 24, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over '438, Mischler, and Thomas, in further view of Laing(US 3591819). '438, Mischler, and Thomas teach every aspect of the invention except the bonding material being an epoxy resin and the inner restraining member being a bonding

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material and a metal band. Laing teaches a laminated stator having a plurality of sections, where the sections are held together by an synthetic resin and a rivet. The examiner takes official notice that an epoxy resin is well known synthetic resin in the motor art. It is inherent that the rivet is metal. It would have been obvious to a person skilled in the art at the time of the invention to construct the stator of '438, Mischler, and Thomas with the bonding material being an resin because Laing teaches that synthetic resins are a known binding material between stator lamination sections, with the resin being an epoxy resin because it is easily molded around the laminations, and with the rivet(banding) securing the tooth laminations together because Laing teaches that both a rivet and resin are used to secure the laminations together.

5. Claim 9 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over '438 and Mischler, in further view of Frischmann (US 4197146). '438 and Mischler teach every aspect of the invention except the specific atomic composition of the amorphous metal. Frischmann teaches the amorphous metal can made up of ONE OR MORE OF THE FOLLOWING: Fe, Ni, or Co from 70-90% which can be replace by Mo, W, Cr, and V from 70-90%, and C, B,P from 10-30% which can be replaced by Al, Sn, Sb, Ge, In and Be from 10-30%(which includes Si, Al, and Ge between 5-20%). Frischmann teaches that the elements within the group are interchangeable and that more than one could be used, which includes Y+Z replaced by In, Sn, or Sb. Frischmann teaches an impurity of C being 0-2% which includes the range of 0-1%. It would have been obvious to a person skilled in the art at the time of the invention to

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construct the stator of '438 and Mischler with MYB composition with M replaced by up to 10% Mo, W, Cr, or V because Frischmann teaches that more than one M element may be used, with the (Y+Z) replaced by In, Sn, or Sb because Frischmann teaches that more than one Y and Z elements can be used, and because it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

- 6. Claims 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over '438, Mischler, and Frischmann, in further view of Datta et al.(Datta)(US 4.409,041). '438, Mischler, and Frischmann teach every aspect of the invention except the FeBSi formula. Datta teaches the FeBSi formula with the ranged and number claimed by the applicant. It would have been obvious to a person of ordinary skill in the art at the time of the invention to construct the stator of '438, Mishcler, and Frischmann with the amorphous material as set forth in claims 10 and 11, because Datta suggests the disclosed range and because Datta suggests the disclosed range to enhance the magnetic properties.
- 7. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over '438, Mischler, and Frischmann, in further view of Vernin et al.(Vernin)(US 5922143). '438, Mischler, and Frischmann teach every aspect of the invention except nanocrystalline microstructure. Vernin teaches than a nanocrystalline structure is suitable for magnetic cores. It would have been obvious to a person of ordinary skill in the art at the time of

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the invention to construct the stator of '438, Mishcler, and Frischmann with the heat treated nanocrystal microstructure because Vernin teaches the nanostructure is good for magnetic cores.

- 8. Claims 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over '438, Mischler, Frischmann, and Vernin, in further view of Yoshizawa et al. (Yoshizawa) (US 4881989). '438, Mischler, Frischmann, and Vernin teach every aspect of the invention except composition of claims 13 and 14. Yoshizawa teaches the composition with similar atomic ranges. It would have been obvious to a person of ordinary skill in the art at the time of the invention to construct the stator of '438, Mishcler, Frischmann, and Vernin with the amporphous composition of claims 13 and 14 because Yoshizawa teaches the components combine to make an amorphous material with excellent magnetic qualities, and in the specific range because a person of ordinary skill in the art would attempt to optimize the atomic composition to provide the best magnetic material.
- 9. Claims 15 –18, 26-33, and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over '438 and Mischler. '438 and Mischler teach every aspect of the invention except the core loss and frequency range of the magnetic material. It would have been obvious to a person of ordinary skill in the art at the time of the invention to construct the stator core of '438 and Mischer with the core loss with the formula of claim

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15, at 1 for 60 Hz, 12 for 1000 Hz, or 70 at 20000 Hz to optimize the magnetic characteristics of the amorphous material.

Claims 28-30 are method of making limitations which are not germane to the patentability of the apparatus.

- 10. Claims 19-21 and 28-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over '438 and Mischler, in further view of Clark et al.(Clark)(US 4,763,030). '438 and Mischler teaches every aspect of the invention, except the heat treatment, application of a magnetic field, and annealing the segments. Clark teaches amorphous metal being a continuous cooled after annealed in a magnetic field. It would have been obvious to a person skilled in the art at the time of the invention to construct the stator of '438 and Mischler with the segments continuously annealed then cooled in a magnetic field, as in Clark, to improve the magnetomechanical coupling factors of the amorphous metal.
- 11. The rejection of Claim 36 under 35 U.S.C. 103(a) over Mishler et al.(4255684) and Takeuchi is withdrawn.

Double Patenting

12. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

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A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

13. Claims 26 and 36 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6,462,456. Although the conflicting claims are not identical, they are not patentably distinct from each other because bulk amorphous segment is type of polyhedron, as shown in figure 2b of the cited patent. The means for supporting the stator and rotor are inherently dislosed in every motor.

Response to Argument

A. Independent Claims 1, 22, and 35

Applicant's arguments filed 2/1/02 have been fully considered but they are not persuasive. The Applicant's arguments that '438 is not amorphous metal is not persuasive. '438 does not disclose the type of magnetic material required. Mischler teaches that amorphous metal is inexpensive to produce and has low magnetic losses(as set forth in the final Office Action). It would have been obvious to a person skilled in the art at the time of the invention to construct the stator of '438 with the metal being an amorphous metal as taught by Mischler to provide an inexpensive motor with low magnetic losses.

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The Applicant's arguments regarding the top and bottom surfaces have lines perpendicular to the axis of rotation is not persuasive. The Applicants argument that the top and bottom surfaces of the pole elements 3 are not substantially parallel to the axis of rotation is not persuasive, because the top and bottom surfaces of the laminations are the radially inner and outer surfaces of the poles 3, not the planar side surfaces as shown in applicant's appendix drawing A2. The Applicant's argument that the edges are not surfaces as set forth in the specification is not persuasive. The radially inner and outer surfaces of each individual laminations in '438 and the surface made from the combined laminations, are both "surfaces" as set for in the claims. The Applicant has not amended the claims to further define the surfaces and the examiner will not read limitations from the specification into the claims, see In re Van Geuns, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993) holding that although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. The applicant's argument further fails because the applicant refers to the edges as "faces" with are inherently surfaces, therefore the Applicant is acknowledging the radially inner and outer ends of the laminations 3 are surfaces.

The Applicant's argument that '438 does not suggest any alternative embodiments and that the examiner has not pointed to alternative embodiments is not peruasive because the examiner has no need to point to alternative embodiments when the references teaches the claimed subject matter. The Applicant's argument that '438 teaches away from the configuration of claims 1, 22, and 35 is not persuasive because

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the Applicant has not cited where '438 teaches away from the claims. The Applicant's generic argument without support is not persuasive.

The Applicant's argument that '438 does not include all segments being perpendicular to the axis of rotation is not persuasive. '438 teaches both the poles 3 and the curved sections 2 having radially inner and outer surfaces with are perpendicular to the axis of rotation. The Applicant's repeated argument that the laminations also have surfaces which are parallel to the axis of rotation does not prevent the laminations from having the radially inner and outer surfaces being substantially perpendicular to the axis of rotation. The rejection is proper because the Applicant's claims are overly broad.

The Applicant's argument regarding the torque benefits of the claimed structure is not persuasive because the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiava*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985).

The Applicant's arguments regarding the structure of Mischler are not persuasive. Mischler provides motivation for the selection of the magnetic material as amorphous material. Mishler teaches the equivalence of steel stripe and amorphous tape, such that a person of ordinary skill in the art is merely choosing between know equivalents (as taught by Mishler, col. 1, line63-66) when making the stator of '438 from amorphous tape. Mischler teaches the preference for amorphous material because the materials low cost and magnetic losses (col. 1, line 16).

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The Applicant's arguments regarding the air gap is not persuasive because it is shown in the primary reference '438. The Applicant's argument regarding a polyphase motor is not persuasive because the limitation has not been claimed. The Applicant's argument that the rejection is based on hindsight is not persuasive because Mischler clearly provides motivation for combination with '438 because of the low cost and low magnetic losses, the motivation having come from the references and not the applicant's specification negates the applicant's hindsight argument (See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971) holding that it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper.).

The Applicant's argument regarding the lack of an air gap of Mischler is not persuasive. The Applicant is clearly ignoring the teachings of '438 which shows the air gap between elements 2 and 3, where the rejections is made on both '438 and Mischler. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986), holding that one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. The Applicant's argument that there is no motivation to combine the references is not persuasive. As stated above, Mischler presents ample

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motivation in the low cost/low loss material of the amorphous metal and the teaching of the equivalence of steel and amorphous strips.

The Applicant's arguments that heat treating is a structural limitation of in claims 19-21 is not persuasive. The claim does not state that heat treatment results in a structural limitation, such a bond between two surfaces. Rather the limitation merely states a method of making limitation of heat treatment. The Applicant's arguments regarding the altered magnetic properties from heat treatment is not persuasive because the limitation was not claimed. Again, the limitation merely states a method of making limitation of heat treatment. The rejection is proper and should be maintained. The examiner notes that an additional rejection under 35 USC 103 was made by the examiner to further demonstrate that the method of making which does alter the physical characteristics of the material is also an obvious over the cited prior art.

The Applicant's argument regarding the strengthening means of claim 22 is not persuasive. '438 teaches a film at the inner and outer butt joints 7 which adheres sections 2-3 together, which inherently performs the function of restraining the pieces together and protecting the teeth from movement and vibrations, and which inherently secures the sections 2 and 3 in a circumferential abutting relationship, as required by claim 22.

B. Claims 4 and 5, Claim 23

The Applicant's argument that claims 4, 5, and 23 are allowable because Claim 1 and 22 are allowable is not persuasive. Claim 1 and 22 are properly rejected as set forth above. Thomas shows a core that is retained and protected by a steel housing

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(col. 2, lines 22-28), where protecting and retaining a core provides ample motivation to combine the reference.

C. Claims 6, 7, 24, and 25

The Applicant's argument that Laing does not add to the teachings of '438, Thomas, and Mischler is not persuasive. The Applicant is viewing the references by itself rather than in combination with the other references(see *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986) holding that one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references). Laing clearly adds to the other references because it teaches that both a rivet and resin are used to secure the laminations together.

The Applicant's argument that claims 6, 7, 24, and 25 are allowable because Claim 1 and 22 are allowable is not persuasive. Claim 1 and 22 are properly rejected as set forth above. Laing shows a core that is secured by both a resin and a band (rivet) to hold the laminated sections together, where the laminated core sections of Laing provides ample motivation to combine the references.

D. Claims 9 and 34

The Applicant's argument that claims 9 and 34 are allowable because Claim 1 and 26 are allowable is not persuasive. Claim 1 and 26 are properly rejected as set forth above. The Applicant's argument regarding the formula of Claims 9 and 34 are not persuasive because Frischman teaches the molecular formula of the amorphous metal is a result effective variable which is in the ordinary skill in the art at the time of

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the invention to optimized the performance thereof. (See *In re Aller, supra*). The Applicant's argument regarding the discontinuous amorphous material of Frischman is not analogous art is not persuasive. Frischman teaches the amorphous material is used in motors (col. 1, line 10), and because Frischman is provided as evidence of the molecular formula being a result effective variable. The rejection is proper and maintained.

E. Claims 10 and 11

The Applicant's argument that claims 10 and 11 are allowable because Claim 9 is allowable is not persuasive. Claim 9 is properly rejected as set forth above. The Applicants argument regarding Datta is not a motor is not persuasive because Data teaches the use of the amorphous material in an electromagnetic devices, such that a person of ordinary skill in the art would optimize the amorphous material of Mischler with the formula of Datta to improve magnetic properties and have a higher thermal stability (see col. 1, lines 61-62). Furthermore, the Applicant is merely optimizing the know parameters of amorphous metal as set forth by Frischman and Datta, which is within the ordinary skill in the art(see *In re Aller*, supra).

F. Claim 12

The Applicant's argument that claim 12 is allowable because Claim 10 and 11 are allowable is not persuasive. Claim 9 is properly rejected as set forth above. The Applicant's that Vernin has no suggestion to combine with motors or an amorphous core is not persuasive. Vernin is not limited to torriodal core or any specific application, but teaches the nanocrystalline structure for magnetic cores and circuits, particularly

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amporhous cores to provide good magnetic permeability and hysteresis loops. The rejection is proper and maintained.

G. Claims 13 and 14

The Applicant's argument that claims 13 and 14 are allowable because Claim 12 is allowable is not persuasive. Claim 12 is properly rejected as set forth above.

The Applicant's argument that Yoshizawa does not teach a magnetic core of a motor is not persuasive because Yoshizawa teaches a nanocrystalline core for magnetic devices because the nanocrystalline structure provides excellent magnetic properties, and a motor is in the same field of endeavor as magnetic device with an amorphous core.

H. Claims 15-18 and 26-33

The Applicant's argument that claims 15-18 and 26-33 are allowable because

Claim 1 is allowable is not persuasive. Claim 1 is properly rejected as set forth above.

The Applicant's argument regarding claims 15-18 and 26-33 is not persuasive because the Applicant is merely optimizing the magnetic characteristics, which the examiner agrees is extrinsic, to provide the best or most efficient magnetic core. The Applicant's argument regarding the low core loss in motors is not persuasive because the title of Mischler clearly defines the amorphous core for use in a motor with low core losses.

The Applicant's arguments that heat treating is a structural limitation of in claims 28-30 is not persuasive. The claim does not state that heat treatment results in a structural limitation, such a bond between two surfaces. Rather the limitation merely

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states a method of making limitation of heat treatment. The Applicant's arguments regarding the altered magnetic properties from heat treatment is not persuasive because the limitation was not claimed. Again, the limitation merely states a method of making limitation of heat treatment. The rejection is proper and should be maintained. The examiner notes that an additional rejection under 35 USC 103 was made by the examiner to further demonstrate that the method of making which does alter the physical characteristics of the material is also an obvious over the cited prior art.

I. Claims 19-21 and 28-30

The Applicant's argument that Clark is non-analogous art because it is not directed to motors is not persuasive. The Applicant is view the references individually rather than the combined teaching of the references(*In re Merck and Co*, Supra.). The examiner notes that the limitations from claims 19-21 and 28-30 are merely method of making limitations which are not germaine to the patentability of the apparatus, nor is any structural limitation set for in the method of making step. The examiner has provided the additional rejection over prior art to show that heating and annealing in a magnetic field is known during the preparation of amorphous magnetic alloys, because the steps are useful removing strains from the material (col. 3, line 44). The rejections are proper and maintained.

J. Claim 36

The Applicant's argument that Takeuchi is persuasive. The examiner has provided a new ground of rejection for claim 36.

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Response to Arguments

14. In view of the Appeal Brief filed on 11/13/02, PROSECUTION IS HEREBY REOPENED. To avoid abandonment of the application, appellant must exercise one of the following two options:

- (1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,
 - (2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karl I.E. Tamai at (703) 305-7066.

The examiner can be normally contacted on Monday through Friday from 8:00 am to 4:00 pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Nestor Ramirez, can be reached at (703) 308-1371. The facsimile number for the Group is (703) 305-3432.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist at (703) 308-0956.

Karl I Tamai PRIMARY PATENT EXAMINER February 9, 2003

